



United States Patent [19]

Taillon et al.

(11) Patent Number: 5,573,414

[45] **Date of Patent:** **Nov. 12, 1996**

- [54] TWO PIECE ELECTRICAL AND FLUIDIC CONNECTOR AND INSTALLATION METHOD THEREFORE

- [75] Inventors: **James K. Taillon**, High Ridge; **Frank R. Reidelberger III**, Chesterfield, both of Mo.

- [73] Assignee: **Mechanical Dynamics & Analysis, Inc., Scotia, N.Y.**

- [21] Appl. No.: 405,225

- [22] Filed: Mar. 16, 1995

- [51] Int. Cl.
- ⁶
- H01R 4/60

- [52] U.S. Cl. 439/191; 29/889.22

- 158] **Field of Search** 439/190, 191,
439/196; 174/9 R, 9 F; 29/889.22

- [56]
- References Cited**

U.S. PATENT DOCUMENTS

- | | | | |
|-----------|---------|---------------------|----------|
| 2,178,931 | 11/1939 | Crites et al. | 439/191 |
| 2,473,879 | 6/1949 | Guarnaschelli | 285/74 |
| 3,006,064 | 10/1961 | Watson | 29/401 |
| 3,006,065 | 10/1961 | Watson | 29/401 |
| 3,085,219 | 4/1963 | Bass, Jr. | 439/195 |
| 3,551,995 | 1/1971 | Marechal | 29/471.3 |
| 4,012,092 | 3/1977 | Godbey | 439/191 |
| 4,087,906 | 5/1978 | Cobaugh et al. | 29/630 D |

- | | | | |
|-----------|---------|-------------------|------------|
| 4,616,894 | 10/1986 | Baker | 439/192 |
| 4,633,554 | 1/1987 | Clark et al. | 29/156.4 R |
| 4,650,110 | 3/1987 | Cheng | 228/242 |
| 4,799,544 | 1/1989 | Curlett | 439/191 |
| 4,830,266 | 5/1989 | Adams, Jr. | 228/231 |
| 4,913,657 | 4/1990 | Naito et al. | 439/192 |
| 5,197,895 | 3/1993 | Stupecky | 439/194 |

Primary Examiner—Neil Abrams

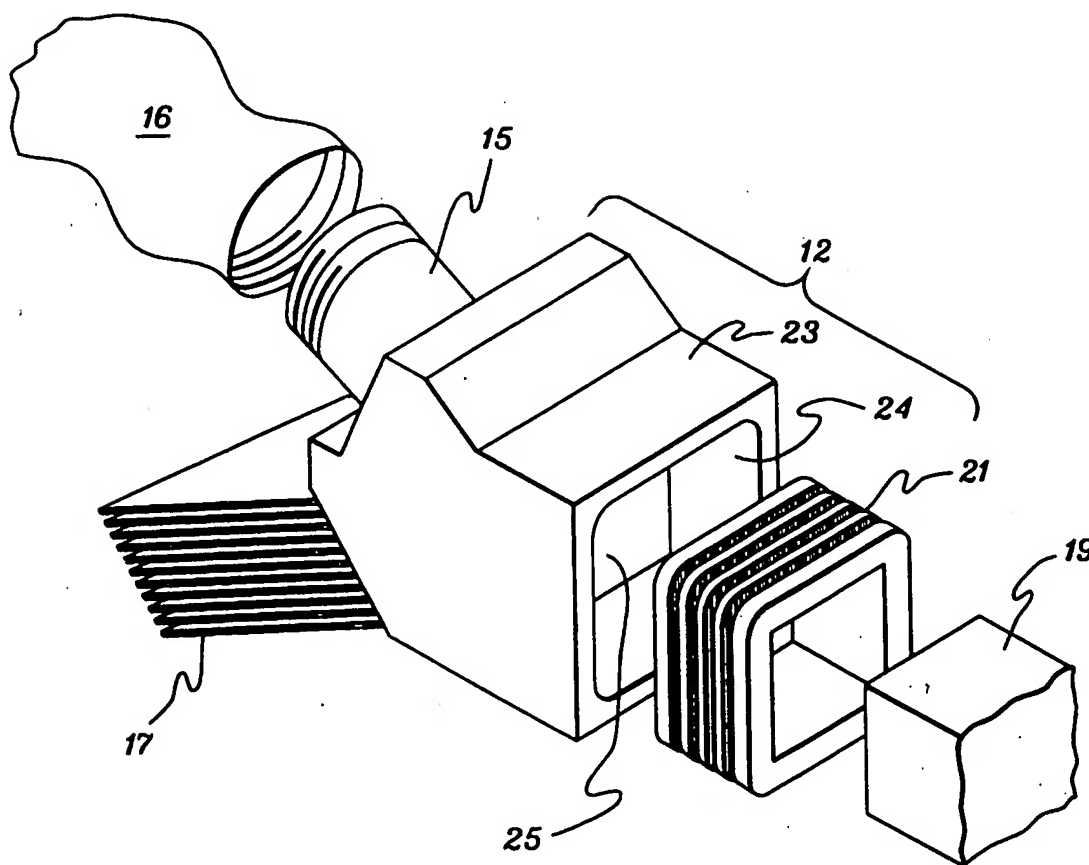
Assistant Examiner—Barry Mathew L. Standig

Attorney, Agent, or Firm—Heslin & Rothenberg, P.C.

[57] **ABSTRACT**

In water cooled electric generators, an electrical and fluidic connector connects a stator bar to an electrical bus and to a water source. The connector comprises two pieces, a clip and a sleeve. During installation, the sleeve is brazed to the stator bar in a fluid tight manner, and the clip is then brazed to the sleeve. Fluidic connection from the generator's water source to the stator bar is provided by a hose attached to a fluid port on the clip. Connection to the electrical bus of the generator is provided by copper leaves and/or copper piping brazed onto the clip. The clip and the sleeve are both formed from copper to form an electrical connection between the copper leaves and/or copper piping and the stator bar. The connector may be further used to replace a defective electrical and fluidic connector that terminates a stator bar in a water cooled electric generator.

21 Claims, 11 Drawing Sheets



BEST AVAILABLE COPY